Architectural Testing

# TAS 100(A)-95 TEST REPORT

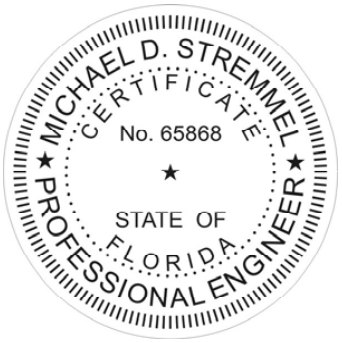
**Rendered to:**

**ENERGY ALTERNATIVES, LLC**

**SERIES/MODEL: Greenward™**
**PRODUCT TYPE: Ridge Vent**

**This report contains in its entirety:**

| | |
|---|---|
| **Cover Page:** | **1 page** |
| **Report Body:** | **5 pages** |
| **Alteration Addendum:** | **1 page** |
| **Test Equipment:** | **1 page** |
| **Photograph:** | **1 page** |




Digitally Signed by: Michael D. Stremmel
2010.04.29 16:34:32 -04'00'

| | |
|---|---|
| **Report No.:** | **96974.03-109-18** |
| **Test Date:** | **04/08/10** |
| **Report Date:** | **04/28/10** |
| **Expiration Date:** | **04/08/20** |
| **Miami-Dade County Notification No.:** | **ATI 10020** |

130 Derry Court
York, PA 17406-8405
phone: 717-764-7700
fax: 717-764-4129
www.archtest.com

Architectural Testing

# TAS 100(A)-95 TEST REPORT

Rendered to:

ENERGY ALTERNATIVES, LLC
P.O. Box 234
Thiellis, New York 10984

| | |
|---|---|
| Report No: | 96974.03-109-18 |
| Test Date: | 04/08/10 |
| Report Date: | 04/28/10 |
| Expiration Date: | 04/08/20 |
| Miami-Dade County Notification No.: | ATI 10020 |

**Project Summary**: Architectural Testing, Inc. was contracted by Energy Alternatives, LLC to conduct wind driven rain testing on a Series/Model Greenward™, ridge vent. All test data, photos, and results are included herein. All test samples were provided by the client.

**Test Procedure**: The test specimens were evaluated in accordance with TAS 100(A)-95, *Test Procedure for Wind and Wind Driven Rain Resistance and/or Increased Windspeed Resistance of Soffit Ventilation Strip and Continuous or Intermittent Ventilation System Installed at the Ridge Area.*

**Test Specimen Description**:

**Series/Model**: Greenward™

**Product Type**: Ridge Vent

**Overall Size**: 11-1/4" wide by 3/4" high by 8' long

**Ridge Vent Description**: The vent was constructed with a custom molded, extruded nylon and a non-woven fabric covering. The non-woven material was bonded on either side of the vent. The top of the vent was not covered by the non-woven fabric which allowed for an exposed opening of 6". The ridge vent utilized a 1-1/2" wide by 8-1/2" long custom shaped plastic bracket secured to the non-woven fabric and extruded nylon with staples. The plastic bracket utilized four 1/2" diameter plastic tubes that ran the length of the ridge vent and were secured into snap-in locks on the plastic bracket.

130 Derry Court
York, PA 17406-8405
phone: 717-764-7700
fax: 717-764-4129
www.archtest.com

**Test Specimen Description**: (Continued)

**Roof Deck Description**: An 8' 0" wide roof deck was utilized on a 3:12 slope. The roof deck consisted of Spruce-Pine-Fir #2 nominal 2x6 lumber sheathed with nominal 15/32" plywood. The rafters were spaced 24" on center. The plywood was nailed to the rafters using 8d common nails spaced 6" on center around the plywood perimeter and 12" on center at intermediate supports.

The sheathing was covered with 30 lb felt paper and 3-tab asphalt shingles. The shingles were secured to the deck per the manufacturer's instructions with galvanized 1-1/2" long roofing nails. An aluminum drip edge was applied around the entire perimeter of the roof deck. A 3-1/2" wide by 7' 0" long slot was cut into the plywood at the ridge.

**Test Specimen Installation**: The vent was installed with one 8' long section centered over the ridge opening. The outer edge of the vent utilized a bead of silicone between the vent and roof deck. The vent was secured with nails on each side of the ridge, located 1" from each end and spaced nominally 12" on center. The galvanized roofing nails were 2-1/2" long with a 0.125" shank diameter, and a 0.375" diameter head that was 0.035" thick. The remainder of the installation consisted of nailing cap shingles across the vent using the same nails. The nail spacing on the cap shingles was approximately 5" on center and utilized two nails per shingle. The vent was installed in accordance with the manufacturer's installation instructions.

**Test Procedure**:

Protocol TAS 100(A)-95 Wind Driven Rain: The wind speed intervals were conducted as follows:

| Interval No. | Wind Speed (mph) | Time (min) | Water Spray |
|---|---|---|---|
| 1 | 35 | 15 | On |
| 2 | 0 | 5 | Off |
| 3 | 70 | 15 | On |
| 4 | 0 | 5 | Off |
| 5 | 90 | 15 | On |
| 6 | 0 | 5 | Off |
| 7 | 110 | 5 | On |
| 8 | 0 | 5 | Off |

**Test Results**: The following results have been recorded:

**Product**: Greenward™ Ridge Vent

Protocol TAS 100(A)-95 Wind Driven Rain:

| Wind Speed | Results | Allowed |
|---|---|---|
| 35 mph | No Entry | 4.39 oz. |
| 70 mph | No Entry | 4.39 oz. |
| 90 mph | No Entry | 4.39 oz. |
| 110 mph | No Entry | 1.46 oz. |
| | | 14.63 oz. |

**Results**: Pass

**Official Observers**: The following representatives witnessed all or part of the testing.

| Name | Company |
|---|---|
| Kevin Scott | Energy Alternatives, LLC |
| Peter Kegler | Energy Alternatives, LLC |
| Tom Lawlor | Architectural Testing, Inc. |
| Michael D. Stremmel, P.E. | Architectural Testing, Inc. |
| Russell W. Clark | Architectural Testing, Inc. |

Detailed drawings, data sheets, representative samples of test specimens, a copy of this report, or other pertinent project documentation will be retained by Architectural Testing, Inc. for a period of four years from the original test date. At the end of this retention period, such materials shall be discarded without notice and the service life of this report will expire.

Results obtained are tested values and were secured by using the designated test methods. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen(s) tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC:

Digitally Signed by: Russell Clark

Russell W. Clark
Technician

Digitally Signed by: Michael D. Stremmel

Michael D. Stremmel, P.E.
Senior Project Engineer

RWC:vlm

Attachments (pages): This report is complete only when all attachments listed are included.
Appendix-A: Alteration Addendum (1)
Appendix-B: Test Equipment (1)
Appendix-C: Photograph (1)

## Revision Log

| Rev. # | Date | Page(s) | Revision(s) |
|---|---|---|---|
| 0 | 04/28/10 | N/A | Original report issue |

## Appendix A

## Alteration Addendum

***Note**: No alterations were required.*

## Appendix B

## Test Equipment

| Instrument | Manufacturer | Asset # |
|---|---|---|
| Vane Axial Fan | Architectural Testing, Inc. | Y003345 |

# Appendix C

## Photograph

**Photo No. 1**
**Test Setup During Test**